



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

124962

JUL 11 1984

NATIONAL SECURITY AND  
INTERNATIONAL AFFAIRS DIVISION



124962

The Honorable Delbert L. Spurlock  
The Assistant Secretary of the Army  
(Manpower and Reserve Affairs)

Dear Mr. Spurlock:

Subject: Observations on Army's plan to buy an electronic  
video-disc delivery system (GAO/NSIAD-84-140)

As part of our current review of the Army's program for developing soldier training materials (code 967106), such as training extension course lessons, we have inquired about Army plans to purchase new training equipment. The purpose of this letter is to bring to your attention our concern over whether the acquisition plans for video-disc equipment are justified based on the low usage of current training materials by soldiers in the field.

BACKGROUND

The Army has programmed about \$140 million for procurement of an electronic video-disc delivery system, as well as the development and conversion of training materials to video-disc, for fiscal years 1985 through 1990. Life-cycle cost of the equipment over the next 20 years is estimated to range as high as \$388 million (adjusted for inflation) for the 20,000 units in the approved acquisition objective. Over 80 percent of equipment that the Army plans to buy by 1990 are for use by soldiers in the field. According to personnel in the Army Communicative Technology Office<sup>1</sup>--which has initiated the acquisition of the new video-disc system--total equipment units could reach 40,000 if the Army fields the system worldwide and adapts it to other applications such as maintenance and repair.

Army Communicative Technology Office personnel told us that the first 920 equipment units to be purchased are for the Army's training schools and that about 17,000 of the remaining 19,080

---

<sup>1</sup>This is a joint U.S. Army Materiel Development and Readiness Command/U.S. Army Training and Doctrine Command office colocated with the Training and Doctrine Command's Army Training Support Center at Fort Eustis, Virginia.

029791  
124962

units will be placed in troop units beginning in fiscal year 1987. Technology Office personnel also told us that about \$900,000 will be spent this fiscal year for development and conversion of training materials to video-disc and that about \$25 million has been programmed for this purpose for fiscal years 1985 through 1990.

According to Communicative Technology Office officials, the new equipment will reduce the present volume of paper training materials and will provide

- a standard information delivery system with high density storage and rapid access capability to replace the paper and other existing audio visual delivery systems,
- the latest state-of-the-art in information delivery, and
- interactive programmed instructions and simulation to the user (for example, the user can automatically reverse the materials for replay or skip materials).

#### SOLDIERS USE OF TRAINING MATERIALS

Our concern about the justification for the new equipment and conversion of training materials to video-disc format centers around the decision to provide a large amount of training equipment to troop units even though the Communicative Technology Office has not analyzed soldiers' past usage levels of training materials. This concern is heightened by studies and other data obtained during our review which indicates that soldiers do not use a large portion of available training extension course materials.

According to Communicative Technology Office officials, the decision regarding the number of equipment units to be placed in troop units was based on providing each battalion in both the active Army and reserve components with four units (one equipment unit per company level troop unit) and not on an analysis of training materials' usage levels.

Our review of training materials' usage has been limited to an analysis of available data for one major type of extension training material--training extension course lessons. According to information provided by the Army Training Support Center, training extension course lessons represented about 31 percent of all extension training materials fielded as of May 1984. Although the Army has not established criteria for evaluating

the extent of training materials usage, it appears--on the basis of limited Army studies--that soldiers do not use these lessons extensively.

A 1979 Army Research Institute study showed that only about 50 percent of the soldiers surveyed through questionnaires had used training extension course materials. The study also showed that 82 percent of recorded uses for selected units during a 2-month period were directed by commanders.

More recent Army studies have also disclosed limited use of training extension course lessons. For example, in 1982 the U.S. Army Audit Agency reported that use of training extension course lessons at the 5th Infantry Division, Fort Polk, Louisiana, was very low. It reported that

--52 of 100 soldiers interviewed had never used the materials, 21 had never heard of them;

--only 7 of 43 companies had included the materials in their training schedules, and then in only 36 of 441 available training days; and

--the average number of soldiers using these materials each month was generally very low compared to the battalion strength level--from 5 to 22 percent for 5 battalions, and 42 percent for the sixth battalion reviewed.

The Army Training Support Center is conducting another training extension course lesson usage survey which is scheduled for completion later this year.

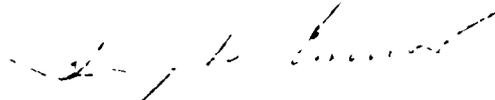
- - - -

In conclusion, in view of the lack of a thorough analysis of the various types of training materials' usage levels, it appears that there is an inadequate basis for the Army to determine how many equipment units to buy and what types of training materials to convert to video-disc. We believe that low usage levels may be more indicative of a lack of need for the training materials being furnished to units in the field than to a deficiency in the type of system used to present the material. Therefore, there may be little reason to believe that the acquisition of new video-disc equipment will result in increased training materials' usage. Our continuing review of the Army's program for developing soldier training materials will address the question of identified training material needs.

We have discussed this concern with personnel in the Training Directorate, Deputy Chief of Staff for Operations and Plans, Department of the Army; and the Communicative Technology Office. If you desire, we would be glad to discuss this further with you.

We would appreciate being advised of your views on the matters discussed in this letter as well as any actions that you may plan to take. We are sending a copy of this letter to the Secretary of the Army.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Henry W. Connor", written in a cursive style.

Henry W. Connor  
Senior Associate Director